Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:030

Permittee Name:	**CTA Acoustics, Inc.**
Mailing Address:	**P.O. Box 448, Corbin, KY 40701**
Source Name:	**CTA Acoustics, Inc.**
Mailing Address:	**100 CTA Boulevard Corbin, KY 40701**
Source Location:	**Southeast KY Regional Industrial Authority Park**
Permit ID:	**F-08-019**
Agency Interest #:	**45671**
Activity ID:	**APE20070001**
Review Type:	**Conditional Major, Operating**
Source ID:	**21-121-00062**
Regional Office:	**London Regional Office 875 S. Main Street London, KY 40741 (606) 330-2080**
County:	**Knox**
Application Complete Date:	**May 14, 2008**
Issuance Date:	**August 14, 2008**
Revision Date:	
Expiration Date:	**August 14, 2013**

John S. Lyons, Director
Division for Air Quality

Revised 05/07/07

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	Permit type	Activity# / Log#	Complete Date	Issuance Date	Summary of Action
F-03-013	**Initial**	**55629**	**5/01/2003**	**10/20/2003**	**Initial Construction & Operating Permit**
F-08-019	**Renewal**	**APE20070001**	**5/14/2008**	**8/14/2008**	**Renewal**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 01 (01) Two Molding Lines

Description: There are ten stacks for molding lines 1 and 2 that in total contain 30 molds. The maximum rate of semi-cured fiberglass from Line 1 and 2 is 6,278 lb/hr. The semi-cured fiberglass is composed of fiberglass and phenolic binder or non-phenolic binder.
Control Equipment: None
Construction Commenced: August 2003

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. **Operating Limitations:**
   The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

2. **Emission Limitations:**
   A. 401 KAR 59:010 § 3(1) – Visible emissions from each control device or stack shall not equal or exceed 20 percent opacity.
   B. 401 KAR 59:010 § 3(2) – Particulate matter emissions from each control device or stack shall not exceed 0.73 pounds per hour.
   C. Source wide emissions of individual HAP shall be less than or equal to 9.8 tons during any twelve (12) consecutive month period.
   D. Source wide emissions of combined HAP shall be less than or equal to 22.5 tons during any twelve (12) consecutive month period.

Compliance Demonstration Methods:

(1) Opacity Standard:
Compliance with the opacity standard shall be determined by conducting a qualitative visual observation of the opacity of emissions at each stack no less than once per operating week and maintaining a log of the observations. If visible emissions from a stack are seen (not including condensed water in the plume), then an inspection of the process equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

(2) Mass Standard:
Compliance with the mass standard is assumed when the affected facility is in compliance with the opacity standard unless testing is required. Monthly particulate emission = (Total phenolic resin usage in pounds/month) *x* (releasing emission factor)

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations (Continued):

(3) VOC/HAP Emissions:

Monthly Formaldehyde Emission = ∑ [(Total monthly phenolic resin usage in pounds) x (HEXA wt. fraction) *x* (releasing emission factor) *x* 0.70]

Monthly Phenol Emission = ∑ [(Total monthly phenolic resin usage in pounds) *x* (phenol wt. fraction) *x* (releasing emission factor) *x* 0.70]

Monthly VOC Emission = ∑ [(Monthly formaldehyde emission + monthly phenol emission)]

(Note: HEXA: Hexamethylenetetramine)

3. Testing Requirements:

A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]

B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions. [401 KAR 59:010, § 4 (5) Test Methods and Procedures]

4. Specific Monitoring Requirements:

A. The permittee shall monitor visible emissions from the stacks weekly as specified above in compliance demonstration method (1).

B. The permittee shall monitor the monthly usage rate of fiberglass and resin in pounds.

C. The permittee shall monitor individual HAP and combined HAP emissions monthly.

5. Specific Recordkeeping Requirements:

A. The permittee shall maintain daily records of the pounds of fiberglass and phenolic resin used.

B. The permittee shall maintain records of the individual HAP content of the fiberglass/phenolic resin used.

C. The permittee shall maintain records of the hexamethylenetetramine content of fiberglass/phenolic resin used.

D. The permittee shall maintain records of the individual HAP and combined HAP emitted on a monthly and rolling twelve-month total basis.

E. The permittee shall maintain all records, including Material Safety Data Sheets for a period of five years.

F. The permittee shall maintain records of weekly qualitative visible emission observations.

G. The permittee shall maintain records of corrective actions taken in response to seeing visible emissions from a stack.

H. The permittee shall maintain records of any Method 9 readings taken in response to seeing visible emission from a stack.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. **Specific Reporting Requirements:** The semiannual monitoring reports required by this permit (see SECTION F(5)) shall be required to contain only records of the following:
   A. Monthly records of the pounds of fiberglass and resin used
   B. Monthly and twelve-month rolling total emissions of individual HAP and combined HAP.

7. **Specific Control Equipment Operating Conditions:** N/A

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 02 (02) Line 1 FULL or SEMI CURE MAT INSULATION LINE

Description:
Line 1 consists of the following units:
MP12 Blending room (resin and fiber blending process)
Maximum usage rate of resin/fiberglass:
6,000 pounds per hour at up to 28% phenolic resin content
6,278 pounds per hour at up to 40% binder (non-phenolic resin) content
MP14 Curing Oven
Maximum usage rate of resin/fiberglass:
6,000 pounds per hour at up to 28% phenolic resin content
6,278 pounds per hour at up to 40% binder (non-phenolic resin) content
Curing Oven (4 Burners)
Maximum rated input capacity per burner: 1.4 MMBTU/hr
MP13 Mat cooling zone/exhaust air

Control Equipment:
MP12 Dust collector is used to control particulate emissions from blending room
Control efficiency: 99%
MP11 Thermal oxidizer #1 is used to control VOC/HAP emissions from the curing oven.
Maximum rated capacity of the burner: 11.0 MMBTU/hr
Construction commenced: August 2003

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. **Operating Limitations:** Refer to GROUP REQUIREMENTS.

2. **Emission Limitations:** Refer to GROUP REQUIREMENTS.

3. **Testing Requirements:** Refer to GROUP REQUIREMENTS.

4. **Specific Monitoring Requirements:** Refer to GROUP REQUIREMENTS.

5. **Specific Recordkeeping Requirements:** Refer to GROUP REQUIREMENTS.

6. **Specific Reporting Requirements:** Refer to GROUP REQUIREMENTS.

7. **Specific Control Equipment Operating Conditions:** Refer to GROUP REQUIREMENTS.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03 (03) Line 2 FULL or SEMI CURE MAT INSULATION LINE

Description:
Line 2 consists of the following units:
MP22 Blending room (resin and fiber blending process)
Maximum usage rate of resin/fiberglass:
6,000 pounds per hour at up to 28% phenolic resin content
6,278 pounds per hour at up to 40% binder (non-phenolic resin) content
MP20 Curing Oven
Maximum usage rate of resin/fiberglass:
6,000 pounds per hour at up to 28% phenolic resin content
6,278 pounds per hour at up to 40% binder (non-phenolic resin) content
Curing Oven (4 Burners)
Maximum rated input capacity per burner: 1.4 MMBTU/hr
MP23 Mat cooling zone/exhaust air

Control Equipment:
MP22 Dust collector is used to control particulate emissions from blending room
Control efficiency: 99%
MP21 Thermal oxidizer #2 is used to control VOC/HAP emissions from the curing oven.
Maximum rated capacity of the burner: 11.0 MMBTU/hr
Construction commenced: August 2003

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. **Operating Limitations:** Refer to GROUP REQUIREMENTS.

2. **Emission Limitations:** Refer to GROUP REQUIREMENTS.

3. **Testing Requirements:** Refer to GROUP REQUIREMENTS.

4. **Specific Monitoring Requirements:** Refer to GROUP REQUIREMENTS.

5. **Specific Recordkeeping Requirements:** Refer to GROUP REQUIREMENTS.

6. **Specific Reporting Requirements:** Refer to GROUP REQUIREMENTS.

7. **Specific Control Equipment Operating Conditions:** Refer to GROUP REQUIREMENTS.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Group Requirements

LIST of POINTS **EU02 Line 1 FULL or SEMI CURE MAT INSULATION LINE**
EU03 Line 2 FULL or SEMI CURE MAT INSULATION LINE

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to each emission unit which commenced construction on or after July 2, 1975.

1. **Operating Limitations:**
   A. The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in Section B (2) below.
   B. In the event the permittee elects to take credit for the VOC emission reduction provided by the thermal oxidizer(s), a performance test shall be required. Refer to Section E.
   C. The permittee shall install, calibrate, maintain and operate in accordance with manufacturer's specifications a weigh-scale device equipped with a continuous recorder.

2. **Emission Limitations:**
   A. 401 KAR 59:010 § 3(1) – Visible emissions from each control device or stack shall not equal or exceed 20 percent opacity.
   B. 401 KAR 59:010 § 3(2) – Particulate matter emissions from each control device or stack shall not exceed 7.30 pounds per hour.
   C. Source wide emissions of individual HAP shall be less than or equal to 9.8 tons during any twelve (12) consecutive month period.
   D. Source wide emissions of combined HAP shall be less than or equal to 22.5 tons during any twelve (12) consecutive month period.

Compliance Demonstration Methods:

(1) Opacity Standard:

Compliance with the opacity standard shall be determined by conducting a qualitative visual observation of the opacity of emissions at each stack no less than once per operating week and maintaining a log of the observations. If visible emissions from a stack are seen (not including condensed water in the plume), then an inspection of the process equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations (Continued):

(2) Mass Standard:

(a) MP12 and MP22 shall be assumed in compliance with the mass standard when the dust collectors are in place and operating efficiently for each blending room. The hourly mass emission rate of particulate from each blending room shall be calculated according to the following equation:

lb/hour emission rate of particulate at blending room = (lb phenolic resin usage/hr) x (releasing emission factor) x (1- control efficiency x capture efficiency)

(b) MP14 and MP20 shall be assumed in compliance with the mass standard when the opacity standard is met. The hourly mass emission rate of particulate from each cure oven shall be calculated according to the following equation:

lb/hour emission rate of particulate at cure oven = (lb phenolic resin usage/hour) x (releasing emission factor)

(3) VOC/HAP Emissions:

VOC/HAP emissions at each curing oven shall be calculated according to the following equations:

Monthly Formaldehyde Emission = ∑ [(Monthly phenolic resin usage in pounds) *x* (HEXA wt. fraction) x (releasing emission factor) *x* (1- destruction efficiency x capture efficiency) *x* 0.30]

Monthly Phenol Emission = ∑ [(Monthly phenolic resin usage in pounds) *x* (phenol wt. fraction) x (releasing emission factor) *x* (1- destruction efficiency x capture efficiency) *x* 0.30]

Monthly VOC Emissions = ∑ (Monthly Formaldehyde emission) + ∑ (Monthly Phenol emission)

3. Testing Requirements:

A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]

B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions. [401 KAR 59:010, § 4 (5) Test Methods and Procedures]

C. Refer to Section E for Thermal Oxidizer #1 and #2 testing requirements.

4. Monitoring Requirements:

A. The permittee shall monitor visible emissions from the stacks weekly as specified above in compliance demonstration method (1).

B. The pressure drop across each dust collector shall be monitored daily on days Line 1 and/or Line 2 operates.

C. The permittee shall monitor the weight and type of resin being used on each line and the time of day that each type of resin is used.

D. The permittee shall monitor individual HAP and combined HAP emissions monthly.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Recordkeeping Requirements:

A. The permittee shall maintain daily records of the pounds of fiberglass and phenolic resin used.
B. The permittee shall maintain records of the individual HAP content of the fiberglass/phenolic resin used.
C. The permittee shall maintain records of the hexamethylenetetramine content of fiberglass/phenolic resin used.
D. The permittee shall maintain records of the individual HAP and combined HAP emitted on a monthly and rolling twelve-month total basis.
E. The permittee shall maintain all records, including Material Safety Data Sheets for a period of five years.
F. The permittee shall maintain records of weekly qualitative visible emission observations.
G. The permittee shall maintain records of corrective actions taken in response to seeing visible emissions from a stack.
H. The permittee shall maintain records of any Method 9 readings taken in response to seeing visible emission from a stack.
I. The permittee shall maintain a record of the minimum pressure drop indicating a need for filter replacement.
J. The date and time of filter replacement shall be recorded.
K. The pressure drop across the dust collector shall be recorded daily.

6. Reporting Requirements: The semiannual monitoring reports required by this permit (see SECTION F(5)) shall be required to contain only records of the following:

A. Monthly records of the pounds of fiberglass and resin used
B. Monthly and twelve-month rolling total emissions of individual HAP and combined HAP.
C. The permittee shall report dates when filters are replaced and the highest pressure drop observed.
D. Any deviations from requirements of Section B shall be reported quarterly. If no deviations occur during a particular quarter, the permittee shall state this in the semiannual report.

7. Specific Control Equipment Operating Conditions:

A. The dust collector shall be operated and maintained according to manufacturer's specifications.
B. Refer to Section E for Specific Control Equipment Operating Conditions for **Thermal Oxidizers #1 and #2**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit	Description	Primary Fuel	Maximum Rated	Date Constructed
04 (06)	Makeup Air Heating Unit	Natural Gas	8.80 MMBTU/hr	August 2003
05 (07)	Makeup Air Heating Unit	Natural Gas	8.80 MMBTU/hr	August 2003
06 (08)	Makeup Air Heating Unit	Natural Gas	8.80 MMBTU/hr	August 2003
07 (09)	Makeup Air Heating Unit	Natural Gas	8.80 MMBTU/hr	August 2003
08 (10)	Makeup Air Heating Unit	Natural Gas	4.76 MMBTU/hr	August 2003
09 (11)	Makeup Air Heating Unit	Natural Gas	4.76 MMBTU/hr	August 2003

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 MMBTU per hour and commenced on or after April 9, 1972.

1. **Operating Limitations:** None

2. **Emission Limitations:**
   A. 401 KAR 59:015 § 4(1) (c) Particulate Matter Standard: The emission rate of particulate matter from each affected facility shall not be in excess of 0.38 pounds per million BTU actual heat input.
   B. 401 KAR 59:015 § 4(2) Opacity Standard: The opacity of continuous emissions from a control device or stack shall be less than twenty (20) percent opacity.
   C. 401 KAR 59:015 § 5(1)(c) Sulfur Dioxide Standard: The emission rate of sulfur dioxide shall not be in excess of 1.54 pounds per million BTU actual heat input.

   Compliance Demonstration Method:
   Compliance with the above standards is assumed when the units are burning pipeline grade natural gas.

3. **Testing Requirements:** None

4. **Specific Monitoring Requirements:**
   The permittee shall monitor the monthly natural gas use in million cubic feet.

5. **Specific Recordkeeping Requirements:**
   The permittee shall maintain a log of the monthly and annual natural gas use.

6. **Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:** None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	Description	Generally Applicable Regulation
1.	Three 0.6 MMBTU/hr air makeup/heating units	N/A
2.	Four 0.8 MMBTU/hr air makeup/heating units	N/A
3.	Two 0.4 MMBTU/hr air makeup/heating units	N/A

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter and volatile organic compounds emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. The emissions of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9.0) tons during any consecutive twelve (12) month period. The emissions of combined HAP shall not exceed twenty-two and a half (22.5) tons per year. Monthly records, which demonstrate compliance with these limitations, shall be maintained and total HAP emissions shall be reported on a semi-annual basis. HAP emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month HAP emissions; subsequently, tons of HAP emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with HAP emission limitations listed herein for the conditional major limitations. These records, as well as purchase orders and invoices for all HAP containing materials, shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

4. The source is in compliance with 401 KAR 63:020 based on the rates of emissions of airborne toxics provided in the application submitted by the source. If the source alters processes, process rates, material formulations, or any other factor that would result in increased emissions of these previously evaluated airborne toxics, or the emission of airborne toxics not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:030, Section 3(1)(a).

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

Thermal Oxidizer #1

Corbet Industries Afterburner (18,300 SCFM Model)
Maximum rated capacity of the burner: 11.0 MMBTU/hr

Thermal Oxidizer #2

Corbet Industries Afterburner (18,300 SCFM Model)
Maximum rated capacity of the burner: 11.0 MMBTU/hr

1. Operating Limitations:

A. The permittee must conduct a performance test on thermal oxidizer #1 and/or thermal oxidizer #2 should the permittee elect to take credit for the VOC emission reduction achieved by these control devices. In the event the permittee elects to take credit for the VOC emission reduction provided by the thermal oxidizers the permittee will be required to ensure that the average combustion chamber temperature in any 3-hour period does not fall below the combustion temperature established during the most recent performance test which demonstrated compliance.

Compliance Demonstration Method:

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. Compliance shall be demonstrated by:

a. Collecting the combustion temperature data continuously (at least once every 15 minutes);
b. Reducing the data to 3-hour block averages; and
c. Maintaining the 3-hour combustion temperature at or above the temperature limit.

B. The permittee shall install, calibrate, maintain, and operate in accordance with manufacturer's specifications a temperature monitoring device in the combustion chamber of the thermal oxidizers or in the duct immediately downstream of the combustion chamber before any substantial heat exchanger occurs.

C. The temperature monitoring device shall have an accuracy of 0.75 percent of the temperature value or ± 5°F, whichever is larger.

D. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes.

E. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the thermal oxidizer to the atmosphere.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS (CONTINUED)

2. Testing Requirements:

A. The permittee shall be required to conduct an initial performance test on the thermal oxidizers to determine the destruction efficiency of VOC emissions in the event the permittee elects to take credit for the VOC emission reduction achieved by the thermal oxidizers, using appropriate US EPA Reference Methods.

B. The permittee shall be required to determine the capture efficiency of the thermal oxidizers if the permittee elects to take credit for the VOC emission reduction achieved by the thermal oxidizers, using appropriate US EPA Reference Methods.

C. Refer to Section G (5).

3. Specific Monitoring Requirements:

A. The temperature in the thermal oxidizer combustion chamber shall be monitored continuously during operation.

B. The position of the flow control damper which diverts flow to or away from the oxidizer shall be monitored continuously.

4. Specific Recordkeeping Requirements:

A. Combustion chamber temperature of the thermal oxidizers shall be recorded continuously (at least once every 15 minutes). The combustion temperature data shall be reduced to 3-hour block averages.

B. Instances when air flow is diverted away the thermal oxidizer shall be recorded.

C. Records of the date, time and duration of each deviation from Operating Conditions A – E.

D. In addition, for all required emissions control equipment, the permittee shall keep the following records:

1. Design and/or manufacturer's specifications.
2. Preventive maintenance records related to performance of control equipment.
3. All periods, during normal operating conditions, where emissions control equipment, required by this permit is bypassed.
4. Description of operating, temperature and pressure-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
5. Data from the temperature and flow control damper position-measuring devices (as prescribed by Specific Record Keeping Requirements A and B) and any temporary data logged manually as back up.

5. Specific Reporting Requirements:

A. The permittee shall record and submit a written report to the Division's London Field office of each instance when the 3-hour average combustion temperature is below the combustion temperature established during the most recent performance test which demonstrated compliance. If no such periods occur during a particular reporting period, the permittee shall state this in the semiannual report.

B. The permittee shall include in the semiannual report the time, flow direction, and reason for each change of position of the flow control damper which diverts flow to or away from the thermal oxidizer.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place (as defined in this permit), and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
   a. Identification of each term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f.. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality London Regional Office 875 S. Main Street London, KY 40741	Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.

11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
    a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
        (1) The size and location of both the original and replacement units; and
        (2) Any resulting change in emissions;
    b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
    c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
    d. The replacement unit shall comply with all applicable requirements; and
    e. The source shall notify Regional office of all shutdowns and start-ups.
    f. Within six (6) months after installing the replacement unit, the owner or operator shall:
        (1) Re-install the original unit and remove or dismantle the replacement unit; or
        (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
      (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in this permit; and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

   a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

   b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

   c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

   If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

   a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;

SECTION G - GENERAL PROVISIONS (CONTINUED)

(2) The permitted facility was at the time being properly operated;
(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
(4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

   a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

      RMP Reporting Center
      P.O. Box 1515
      Lanham-Seabrook, MD 20703-1515.

   b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A